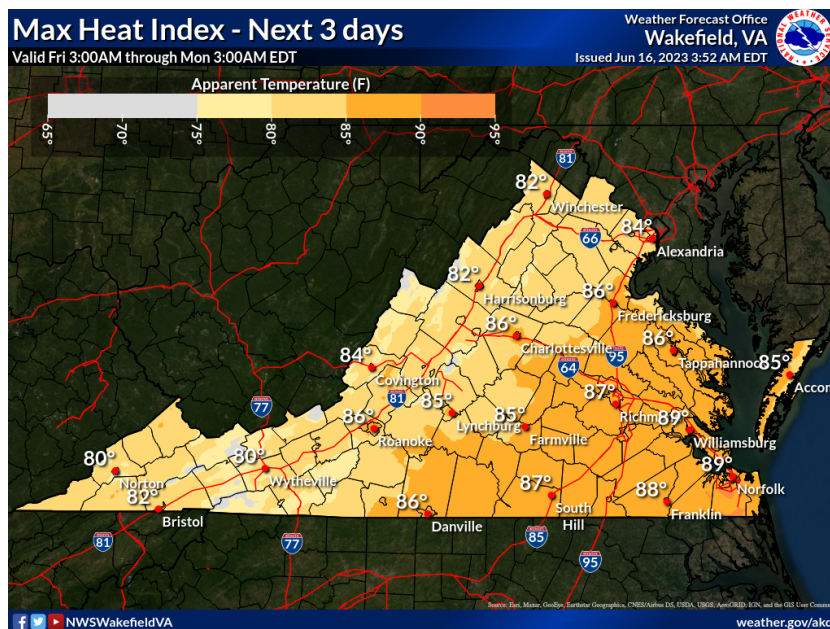


June 16, 2023

## Key Takeaways

- Case rates of COVID-19 continue to be at a seasonal low. COVID-19 hospitalization rates in Virginia decreased 40% from the previously recorded week.
- A key FDA committee recommended updating the COVID-19 vaccine to target XBB strains. The new formulation will likely be available in late summer or early fall, pending recommendation by the CDC, with eligibility still to be determined.
- Cancer drugs, including widely used generic drugs, are experiencing a shortage. Some experts suggest it may be year's end before shortages begin to ease.
- The first incidences of mosquito-borne illness for 2023 were detected in mosquito samples from Pennsylvania, Indiana, and Michigan.
- Peru is experiencing its worst dengue fever outbreak on record. Experts suggest El Niño has been contributing to the outbreak through the increased heavy rains and flooding.

## Key Figures



## COVID-19

22%

*Chance that the WHO will identify a new COVID-19 Variant of Concern before 2024. (Metaculus [forecast](#))*

72

COVID-19 [hospital admissions](#) in Virginia for the week ending June 10.

## Mpox

3.7

*Metaculus [forecast](#) of the number of mpox cases Virginia will experience in Q2, 2023.*

## Wildfires

217 of 446

The number of uncontrolled [wildfires](#) in Canada, out of the total number of active fires.

## Mosquito-Borne Illnesses

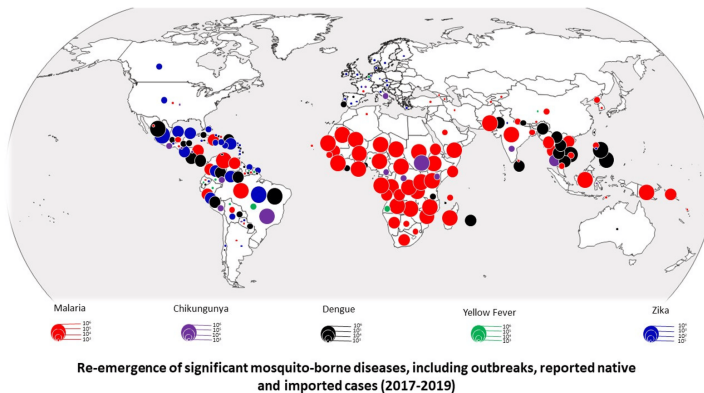
13

5 year average number of [West Nile virus disease cases](#) reported in Virginia each year.

## *Spotlight:* Mosquito-Borne Illnesses

*Forecasts are italicized*

## Spotlight



Map of significant resurgences of mosquito-borne diseases worldwide (through September 2019). Source: [Pathogens](#).

- **Peru is experiencing its worst dengue fever outbreak on record.** Peru has 137,539 dengue cases and registered at least 223 deaths, the [highest mortality rate](#) for the virus in the Americas. Most of the deaths have [occurred](#) in northern Peru, where hospitals have exceeded their capacity. Heavy rains and flooding in recent months has contributed to the severity of the outbreak.

## Mosquito-Borne Illnesses

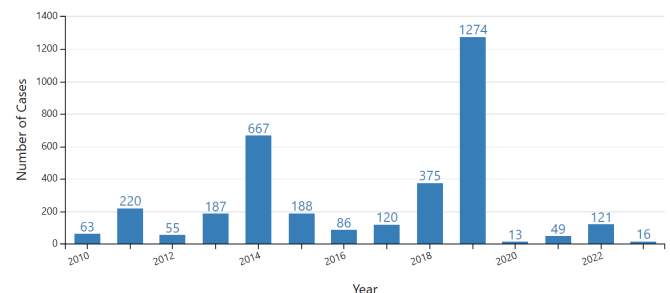
- **West Nile Virus (WNV) found in Pennsylvania and Indiana mosquito samples.** Cumberland County, in Central PA, reported the state's first positive case of WNV in a mosquito sample for 2023. WNV was also identified in a mosquito sample near Indianapolis, Indiana.
- **First mosquito-borne virus in 2023 detected in Michigan.** Mosquitos recently collected in Saginaw County tested positive for the [Jamestown Canyon virus \(JCV\)](#). In Michigan, a total of six people were infected with JCV in 2021, with one person in 2022.
- **A vaccine for [chikungunya virus \(CHIKV\)](#) shows promise in phase III trial, published in *The Lancet*.** The study enrolled 4,115 healthy adults across 43 study sites in the US. Immune responses were strong with 99% showing antibody levels considered to protect against the virus 28 days after vaccination. Studies in areas where CHIKV is endemic will be needed to verify real world impacts. There have been three cases [reported](#) in California so far this year, although none were acquired locally.

## Other News

- **A key FDA committee recommended updating to the COVID-19 vaccine to target XBB strains.** The [Vaccines and Related Biological Products Advisory Committee \(VRBPAC\)](#) voted unanimously to target XBB in a monovalent vaccine. The new formulation will likely be [available](#) in late summer or early fall, pending recommendation by the CDC, with eligibility still to be determined.
- **Mpox transmission stays low globally, with mixed regional patterns.** Minnesota reported its first mpox patients of 2023, both of them adults from Hennepin County. Global mpox transmission continues at low levels, though two regions—Southeast Asia and Africa—[reported](#) increases in recent weeks.
- **Equatorial Guinea declared the end of the [Marburg virus disease \(MVD\)](#) outbreak.** The declaration was made on June 8th after two consecutive incubation periods (42 days) without a new confirmed case reported. A total of 17 confirmed and 23 probable cases were reported, resulting in 35 deaths. An unrelated outbreak in Tanzania [ended](#) June 2.
- **Some cancer drugs are in short supply, putting patients' care at risk.** The shortage is so dire the FDA recently said it would [allow import](#) of unapproved cisplatin from China.
- **Texas reported its first measles case since 2019.** A young child was recently diagnosed with measles. The child had no history of travel to an area where measles is spreading and no known exposure to a person with measles. The child has been treated and is recovering.

### Number of measles cases reported by year

2010-2023\* (as of June 8, 2023)



Number of measles cases reported by year in the US.  
Data Source: [CDC](#).